

REMARKS

Claims 1-6, 9, 11, 12, and 20 are pending in the present application. Claims 2 and 20 have been amended in this response. Claim 7, 8, 10, and 13-19 have previously been cancelled.

In the Office Action dated May 13, 2009, the Examiner rejected Claims 1-6, 9, 11, 12, and 20 are under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, with regard to claims 2 and 20, the Examiner did not find support for the limitation "including legs forming apertures" in the specification as originally filed. Further, with regard to claims 2 and 20, the Examiner did not find support for the limitation "and forming a hollow wire" in the specification as originally filed.

Applicants have amended claims 2 and 20 to recite that the legs define apertures. Support for this can be found in the specification in paragraphs [0019] and [0022], as numbered in the US publication, that state that support portions 14 define a mesh 18, that such a mesh 18 represents an opening in the carrier structure, and that in production of the carrier structure by cutting out the legs 12 and 16 ... apertures are provided. Additionally, Applicants have amended claims 2 and 20 to recite that the marker element includes a comparatively radiopaque material completely enclosed by a cover layer of a metal or metal compound material other than the radiopaque material and including the titanium-nickel alloy and together the radiopaque material and the cover layer form a core filled wire. Support for this can be found in the specification in paragraph [0025], as numbered in the US publication, that states that a marker is formed by a wire which, in its interior, includes a core of x-ray opaque material ... that core is completely enclosed by the carrier material. Applicants request that the Examiner withdraw this rejection.

In the Office Action dated May 13, 2009, the Examiner rejected Claims 1-6, 9, 11, 12, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have amended Claims 2 and 20 as stated above and believe that this obviates this rejection. Applicants request that the Examiner withdraw this rejection.

In the Office Action dated May 13, 2009, the Examiner rejected claims 1-3, 6, 9, 11, 12, and 20 under 35 U.S.C. 102(b) as being anticipated by Dang (6,471,721).

The Examiner has asserted that the applicant has presented product-by-process limitations in applicants' claims. The Examiner noted that it has been held that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." Please see MPEP 2112 and *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The Examiner noted that any article that has the resultant structural limitations despite being formed by a different process will be held to anticipate the claimed article.

The Examiner has asserted that the fact that the apertures have "at least one marker element welded in at least one of the apertures" is a product-by-process limitation in that the resultant article could have all of the apertures filled in with marker elements, and therefore there would not be any apertures in the finished article.

Applicants have amended Claims 2 and 20 to recited in pertinent part that at least one marker element is welded to at least one leg. Applicants note that this limitation does not merely recite how two parts of the stent are joined but describes what it is. Welding is a unique uniting process in metallurgy and leaves a discernible bond. The Examiner has cited Dang as disclosing this structure. However, Dang discloses a material inserted into grooves (see col 5 line 39) with a thin layer covering the material (see col 5 line 67 - col 6 line 1). These finished articles are easily differentiable. Further, while the Examiner has stated that a hypothetical resultant article could have all of the apertures filled in with marker elements, and therefore there would not be any apertures in the finished article; the Examiner has cited no such piece of art. Additionally, the claims do not recite apertures in the finished article. Claims 2 and 20 have been amended to recite in pertinent part a stent comprises carrier structure comprising a cut out metal tube including legs defining apertures. This describes what the carrier structure is, even if something may be within the aperture. For example a common plumbing pipe defines a conduit even if it may be filled with water.

The Examiner also asserted that the fact that the comparatively radiopaque material is "filling and completely enclosed by a cover layer" implies that a hollow wire was filled with material; however, if an article is found that comprises a core of comparatively radiopaque material and a cover layer of a metal or metal compound other than the comparatively radiopaque material it will be held to anticipate the claim.

Applicants note that claims 2 and 20 have been amended to recite in pertinent part that at least one marker element includes comparatively radiopaque material completely enclosed by a cover layer of a metal or metal compound material other than the radiopaque material and including the titanium-nickel alloy and together forming a core filled wire (emphasis added). As discussed above, Dang discloses a material inserted into grooves with a thin layer covering the material. As seen in Fig. 3 of the present application and Fig. 5 of Dang, cited by the Examiner in the Office Action, these structures are clearly differentiable. While the cover layer of Dang may enclose the material in a groove it does it does not form a core filled wire with the material.

Further the Examiner has stated that the stent 10 of Dang reads on applicants' carrier structure and comprises a radiolucent material, i.e. "difficult to visualize fluoroscopically" (col. 3, lines 22-31 and col. 5, lines 12-23). The Examiner then noted that the stent is produced from a cutout metal tube stock 11 (see Figure 1) and that the device may have radiopaque material 13, which the Examiner stated may read on applicants' comparatively radiopaque material, incorporated therein (col. 5, lines 38-41). The Examiner then noted from Figures 1-3 that the radiopaque material is incorporated in cylindrical cut grooves 12 around the circumference of the tube stock (Figure 1-3) and that the cylindrically cut grooves are then covered over with the sputtered coating 14. The Examiner then stated that the tube stock 11, with the cylindrically cut grooves 12, filled with radiopaque material 13, and then covered over with the sputtered coating 14 read on applicants' at least one marker element and that the marker elements are attached to the rest of the carrier structure 10 (Figure 4). The Examiner then noted that the marker elements are integral to the carrier structure; however, the longitudinal sections of the stent 10 spanning the distance between the cylindrical marker elements read on applicants' carrier structure (Figure 4).

Applicants point out that if the longitudinal sections of stent 10 are compared to the carrier structure a recited in claims 2 and 20 the Examiner will see that while the carrier

structure, in the present applications, includes legs defining apertures; the longitudinal sections, of Dang, (without the cylindrically cut groove portions) are merely a series of independent unconnected parallel portions which form no connected shape let alone define any apertures.

While the Examiner has asserted that although formed by a different process, i.e. forming grooves 12, filling with radiopaque material 13 and covering over with the sputtered coating 14, and the Examiner has deemed the cover layer (14 and 11) has the same resultant structure as a hollow wire into which the radiopaque material fills the core thereof as claimed; Applicant notes that the claims have been amended to recite that the radiopaque material and cover layer together form a core filled wire. Again, this is not the same structure as disclosed in Dang where a groove is filled with material and covered with a sputtering.

In the Office Action, the Examiner has maintains that although the cover layer of Dang is formed by a different process, i.e. forming grooves 12, filling with radiopaque material 13 and covering over with the sputtered coating 14, the Examiner deems the cover layer (14 and 11) has the same resultant structure as a hollow wire into which the radiopaque material fills the core thereof as claimed. Applicants again note that these structures are differentiable for the reasons stated above.

Additionally, in the Office Action, the Examiner has deemed the marker element (14, 13, and 11) in the form of the cylindrically shaped marker element going around the circumference of the stent has the same resultant structure as a marker element welded into an aperture as claimed. Applicants again note, as stated above, this would only leave a series of parallel unconnected longitudinal members to form the carrier structure, which cannot form the carrier structure recited in the claims which includes apertures.

Again, the Examiner has stated that this is the same resultant structure because each cylindrically shaped marker element is joined to other cylindrically shaped marker elements by longitudinal sections of the stent 10 spanning the distance between said cylindrical marker elements and that if there was no cylindrically shaped marker element, the lack of that element would read on an aperture. However, applicants note that the independent claims have been amended to recite in pertinent part that the legs of the carrier structure define the apertures. It is impossible for a series of parallel unconnected longitudinal members to define apertures.

In the Office Action dated May 13, 2009, the Examiner rejected Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Dang (6,471,721) as applied to claim 3, in view of

applicants' own admissions; and rejected Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dang (6,471,721) as applied to claim 2 in view of Kranz et al. (6,312,456).

These claims are both ultimately dependent from Claim 2 and contain all of the limitations recited there in and are patentable over the art for the reasons stated above. As such, Applicants request that the Examiner withdraw these rejections of the claims.

The outstanding Office Action was electronically transmitted on 13 May 2009. The Examiner set a shortened statutory period for reply of 3 months from the mailing date. This response is dated 15 September 2009. Therefore, the Applicants believe that this response is timely filed with a request for a two month extension of time. The Applicants, however, hereby make a conditional petition for any further necessary extensions of time for response in the event that such a petition is required. The Commissioner is authorized to charge any fee required with the filing of this paper or to credit any overpayment to Deposit Account 15-0450.

Respectfully submitted,

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